UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION VII
901 NORTH 5TH STREET
KANSAS CITY, KANSAS 66101

NOV 0 7 2007

MEMORANDUM

SUBJECT: Evaluation of Soil Samples
Huge' Company Site
Pagedale, Missouri

FROM: Mike Beringer
Toxicologist
ENSV/EAMB

TO: Jim Silver
On-Scene Coordinator
SUPR/ER&R

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Superfund
0400

As requested, we reviewed the test pit soil sample results collected at the Huge' Company Site, located in Pagedale, Missouri. The purpose of our review is to determine whether the levels of arsenic, chlordane, and 2,4,5-trichlorophenoxy propionic acid (2,4,5-TP) or Silvex pose a significant health threat from direct contact (i.e., ingestion, inhalation, dermal contact) that may warrant additional removal activities. We did not evaluate the potential for these compounds to leach from soil to groundwater.

On February 16, 1999, 4 trenches or test pits were excavated to a depth of approximately 1 to 2 feet below ground surface to evaluate possible subsurface contamination. A soil sample was collected from each test pit and analyzed for arsenic, chlordane, and 2,4,5-TP. For purposes of evaluating the results, we assumed the soil samples are representative of current site conditions, which may not be the case. The results show that only one sample contained chlordane greater than the Removal Action Level (RAL) established for the site. It is important to note that the Missouri Department of Natural Resources (MDNR) Any Use Soil Levels were used as the Removal Action Levels. The Any Use Levels are primarily used as soil clean-up levels and, as a result, are significantly below soil concentrations that we would typically consider appropriate for triggering a removal action from direct contact with contaminated soil.

We conducted a screening-level evaluation by comparing the highest detected concentration of chlordane (4.35 mg/kg) to the U.S. EPA, Region 9, Residential Soil Preliminary Remediation Goal (PRG), which is 1.6 mg/kg. The Region 9 PRG corresponds to an excess individual lifetime cancer risk of 1×10^{-6} (i.e., 1 in 1,000,000). Thus, if one assumes exposure to 4.35 mg/kg of chlordane for 350 days per over a period of 30 years, the excess cancer risk is only about 3×10^{-6} or 3 in 1,000,000 for a residential receptor. We conclude the concentrations of

arsenic, chlordane, and 2,4,5-TP do not represent a significant direct contact threat under the assumed exposure conditions.

If you have any further questions, please feel free to contact me at x7351.